भारतीय मानक
Indian Standard

IS 4686 : 2021

वस्त्रादि — टाईपराइटर/प्रिंटर रिबन का कपड़ा — विशिष्टि

(दूसरा पुनरीक्षण)

Textiles — Typewriter/Printer Ribbon Fabric — Specification

(Second Revision)

ICS 59.080.30

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FOREWORD

This Indian Standard (Second Revision) was adopted by the Bureau of Indian Standards, after the draft finalized by the Man-made Fibres, Cotton and their Products Sectional Committee had been approved by the Textiles Division Council.

This standard was first published in 1968 and revised in 1980. The present revision has been taken up to cover the fabric for printer ribbons also.

The composition of the Committee responsible for the formulation of this standard is given at Annex B.

For the purpose of deciding whether a particular requirement of this standard is complied with the final value, observed or calculated expressing the result of a test or analysis shall be rounded off in accordance with IS 2 : 1960 'Rules for rounding off numerical values (*revised*)'. The number of significant places retained in the rounded off value should be the same as that of the specified value in this standard.

Indian Standard

TEXTILES — TYPEWRITER/PRINTER RIBBON FABRICS — SPECIFICATION

(Second Revision)

1 SCOPE

1.1 This standard prescribes the constructional details and other particulars of two varieties of cotton fabric used for typewriter/printer ribbons, scoured or bleached.

1.2 This standard does not specify the general appearance, feel, shade, etc of the cloth.

2 REFERENCES

The following standards contain provisions which, through reference in this text, constitute provisions of this standard. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this standard are encouraged to investigate the possibility of applying the most recent editions of the standards indicated below.

3 MANUFACTURE

3.1 Yarn — Cotton yarn used in the manufacture of the fabric should be satisfactory in evenness and reasonably free from neps and spinning defects.

4 REQUIREMENTS

4.1 Constructional Particulars — The constructional particulars of the fabric shall conform to those given in Table 1, excepting the count of warp and weft yarn which have been given for guidance only.

4.2 Other requirements of the fabric shall conform to those given in Table 2.

Table 2 Requirements of Typewriter/Printer Ribbon Fabrics

(*Clause* 4.2)

Sl No.	Characteristic	Requirement	Method of Test
(1)	(2)	(3)	(4)
i)	Thickness, *Max*	0.18 mm	IS 7702
ii)	Scouring loss, *Max*	1 percent	IS 1383
iii)	*p*H value	5.5 to 7.5	IS 1390
iv)	Shrinkage, *Max* (warpway or weftway)	2 percent	IS 2977
v)	Absorbency	less than 10 s	IS 2369

Table 1 Constructional Particulars of Typewriter/Printer Ribbon Fabrics

(*Clause* 4.1)

Variety No.	Approximate Count		Ends per cm	Pick per cm	Mass, g/m^2	Breaking Load on 5.0 × 20 cm strips, N (kgf), *Min*		Length, m (*Min*)	Width, cm	Weave
	Warp	Weft				Warpway	Weftway			
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
1	75s (8 tex)	85s (7 tex)	58	60	90	370 (38)	430 (44)	40 or as agreed	100/105 or as agreed	Plain
2	60s (10 tex)	70s (8.5 tex)	52	51	99	410 (42)	450 (46)	-do-	-do-	Plain
Tolerance, Percent			± 5	± 5	± 5				± 2	
Method of Test			-------- IS 1963 --------		IS 1964	-------- IS 1969 -------		---------- IS 1954 -------		Visual

NOTES

1 To convert cotton count to universal count, in tex, divide 590.5 by the cotton count.

2 1 Newton (N) is approximately equivalent to 0.102 kgf.

4.3 Sealed Sample — If in order to illustrate or specify the general appearance, feel and other unmeasurable characteristics of the fabric, a sample has been agreed upon and sealed, the supply shall be in conformity with the sealed sample in such respects.

4.3.1 The custody of the sealed sample shall be a matter of prior agreement between the buyer and the seller.

5 MARKING

5.1 The fabric shall be marked with the following:

a) Name of the material vize, 'Typewriter/Printer Ribbon Fabric';
b) Variety number;
c) Width and length of the piece;
d) Manufacturers' name, initials or trade-mark, if any; and
e) Year of manufacture.

5.2 BIS Certification Marking

The product(s) conforming to the requirements of this standard may be certified as per the conformity assessment schemes under the provisions of the *Bureau of Indian Standards* Act, 2016 and the Rules and Regulations framed thereunder, and the product(s) may be marked with the Standard Mark.

6 PACKING

The cloth shall be packed in bales or cases in conformity with the procedure laid down either in IS 1347 or IS 293 as required.

7 SAMPLING

7.1 For ascertaining the conformity of the fabrics submitted for inspection for the characteristics namely ends, picks, mass in g/m^2, breaking load, length, width and thickness, the methods given in IS 3919 shall be followed.

7.2 For ascertaining the conformity for the characteristics namely scouring loss, *p*H value and shrinkage, the methods given in IS 5463 shall be followed.

ANNEX A

(*Clause* 2)

LIST OF REFERRED INDIAN STANDARDS

IS No.	*Title*
293 : 1980	Code for seaworthy packaging of cotton yarn and cloth (*third revision*)
1347 : 1972	Specification for inland packaging of cotton cloth and yarn (*first revision*)
1383 : 1977	Methods for determination of scouring loss in grey and finished cotton textile materials (*first revision*)
3919 : 1966	Methods for sampling cotton fabrics for determination of physical characteristics
1390 : 2019/ ISO 3071 : 2005	Textiles — Determination of *p*H of aqueous extract (*second revision*)
1954 : 1990	Determination of length and width of woven fabrics — Methods (*second revision*)
1963 : 1981	Methods for determination of threads per unit length in woven fabrics (*second revision*)
1964 : 2001	Textiles — Methods for determination of mass per unit length and mass per unit area of fabrics (*second revision*)
1969 (Part 1) : 2018/ ISO 13934-1 : 2013	Textiles — Tensile properties of fabrics: Part 1 Determination of maximum force and elongation at maximum force using the strip method (*fourth revision*)
2369 : 1967	Method for determination of absorbency of absorbent textile materials (*first revision*)
2977 : 1989	Fabrics (other than wool) — Method for determination of dimensional changes on soaking in water (*first revision*)
5463 : 1969	Methods for sampling of cotton fabrics for chemical tests
7702 : 2012/ ISO 5084 : 1996	Textiles — Determination of thickness of textiles and textile products (*first revision*)

ANNEX B

(*Foreword*)

COMMITTEE COMPOSITION

Man-Made Fibres, Cotton and their Products Sectional Committee, TXD 31

Organization	*Representative(s)*
ICAR-Central Institute for Research on Cotton Technology, Mumbai	Dr P. K. Mandhyan (***Chairman***) Dr A. Arputharaj (*Alternate*)
Ahmedabad Textile Industry's Research Association, Ahmedabad	Shrimati Deepali Plawat Shri Jigar Dave (*Alternate*)
Association of Synthetic Fibre Industries New Delhi	Shri M. S. Verma
Bidhata Industries Pvt Ltd, Mumbai	Shri R. K. Pacheriwala Shri Rohit Pacheriwala (*Alternate*)
Confederation of Indian Textile Industry, New Delhi	Shri D. K. Nair Shri Shaju Mangalam (*Alternate*)
Consumer Guidance Society of India, Mumbai	Dr Sitaram Dixit Dr M. S. Kamath (*Alternate*)
Cotton Association of India, Mumbai	Secretary
Defence Materials and Stores Research and Development Establishment, Kanpur	Shri Ashok Kumar Yadav Shri Biswa Ranjan Das (*Alternate*)
Grasim Industries Limited, Vadodara	Shri Ajay Sardana Dr Rohitasva Kumar (*Alternate*)
In Personal Capacity	Shri A. Satheesan
Office of the Textile Commissioner, Mumbai	Shri Sourabh Kulkarni Shri Pranav Parasher (*Alternate*)
Reliance Industries Limited, Mumbai	Shri Ajay Gupta Shri Keshav Paareek (*Alternate*)
Textiles Committee, Mumbai	Shri J. D. Barman Shri P. N. S. Sivakumar (*Alternate*)
The Bombay Textile Research Association, Mumbai	Shri R. A. Shaikh Shrimati Pragati Kulkarni (*Alternate*)
The Cotton Corporation of India Ltd, Navi Mumbai	Shri P. N. Pillewar Shri V. K. Sinha (*Alternate*)
The Cotton Textile Export Promotion Council, Mumbai	Shri Siddartha Rajgopal
The Southern India Mills' Association, Coimbatore	Shri D. Suresh Anand Kumar
The Synthetic and Rayon Textile Export Promotion Council, Mumbai	Shri S. K. Khandelia Shri Praveen Kumar S. Sadh (*Alternate*)
The Synthetic and Art Silk Mills Research Association, Mumbai	Dr Manisha Mathur Shrimati Ashwini A. Sudam (*Alternate*)
Veermata Jijabai Technological Institute, Mumbai	Dr (Shrimati) Suranjana Gangopadhyay Shri S. P. Borkar (*Alternate*)
BIS Director General	Shri A. K. Bera Scientist 'F' and Head (TXD) [Representing Director General (*Ex-officio*)]

Member Secretary

Shri A. K. Bera
Scientist 'F' and Head (Textiles), BIS

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Amendments Issued Since Publication

Amend No.	Date of Issue	Text Affected

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